

| Numb | Description |
|------|--|
| | DESCRIBED IN TEXT |
| 1 | Intracranial Stimulating Electrode |
| 2 | Intracranial Stimulating Electrode |
| 3 | Intracranial Stimulating Electrode |
| 4 | Intracranial Stimulating Electrode |
| 5 | Intracranial Recording Electrode |
| 6 | Intracranial Recording Electrode |
| 7 | Intracranial Catheter |
| 8 | Connecting Cable |
| 9 | Calvarium |
| 10 | Scalp |
| 11 | Head-mounted Acoustic Sensor |
| 12 | Head-mounted Accelerometer |
| 13 | Positive Proximal EMG Electrode |
| 14 | Reference Proximal EMG Electrode |
| 15 | Negative Proximal EMG Electrode |
| 16 | Proximal Connecting Cable |
| 17 | Positive Distal EMG Electrode |
| 18 | Negative Distal EMG Electrode |
| 19 | Distal Acoustic Sensor |
| 20 | Positive Distal EMG Connecting Cable |
| 21 | Negative Distal EMG Connecting Cable |
| 22 | Distal Acoustic Connecting Cable |
| 23 | Enclosure-mounted positive EMG Electrode |
| 24 | Enclosure-mounted negative EMG Electrode |
| 25 | Enclosure-mounted reference EMG Electrode |
| 26 | Stimulating and Recording Circuit |
| 27 | Proximal Acoustic Sensor |
| 28 | Proximal Accelerometer |
| 29 | Catheter Anchor |
| 30 | Acoustic Sensor Connecting Cable |
| 31 | Accelerometer Connecting Cable |
| 32 | Distal Peripheral Nerve Electrode Array connecting |
| 33 | Distal Accelerometer |
| 34 | Distal Accelerometer Connecting Cable |
| 35 | Enclosure-mounted Acoustic Sensor |
| 36 | Enclosure-mounted Accelerometer |
| 37 | Intracranial Stimulating Electrode Array |
| 38 | Intracranial Recording Electrode Array |
| 39 | EEG Electrode |
| 40 | EEG Electrode |
| 41 | EEG Electrode |
| 42 | Reference Distal EMG Electrode |
| 43 | Stimulating and Recording Unit |
| 44 | Circuit Enclosure |
| 45 | Proximal EMG Electrode Array |
| 46 | Enclosure-mounted EMG Electrode Array |
| 47 | Distal EMG Electrode Array |
| 48 | Reference Distal EMG Connecting Cable |
| 49 | Enclosure-Mounted EMG Electrode Array |
| 50 | EMG Electrode Array |
| 51 | EEG Electrode Array |
| 52 | Accelerometer Array |
| 53 | Acoustic Transducer Array |
| 54 | Peripheral Nerve Electrode Array |
| 55 | Patient Interface Module |
| 56 | Supervisory Module |
| 57 | Intracranial Stimulating Array Amplifier |
| 58 | Intracranial Recording Array Amplifier |
| 59 | EMG Electrode Array Amplifier |
| 60 | EEG Electrode Array Amplifier |
| 61 | Accelerometer Array Amplifier |
| 62 | Acoustic Transducer Array Amplifier |
| 63 | Peripheral Nerve Electrode Array Amplifier |
| 64 | Intracranial Stimulating Array Filter |
| 65 | Intracranial Recording Array Filter |
| 66 | EMG Electrode Array Filter |

| Numb | Description |
|------|--|
| 67 | EEG Electrode Array Filter |
| 68 | Accelerometer Array Filter |
| 69 | Acoustic Transducer Array Filter |
| 70 | Peripheral Nerve Electrode Array Filter |
| 71 | Signal Processor |
| 72 | Control Circuit |
| 73 | Pulse Generator |
| 74 | Output Amplifier |
| 75 | Multiplexor |
| 76 | Signal Conditioning Circuit |
| 77 | Output Stage Circuit |
| 78 | Conditioned EMG signal path |
| 79 | Conditioned EEG signal path |
| 80 | Conditioned Accelerometer signal path |
| 81 | Conditioned Acoustic signal path |
| 82 | Conditioned Peripheral Nerve Electrode (PNE) signal path |
| 83 | Conditioned Intracranial recording electrode (ICRE) |
| 84 | Conditioned Intracranial stimulating electrode (ICSE) |
| 85 | Spike Detector |
| 86 | Spike Characterizer |
| 87 | Spike Analyzer |
| 88 | Intracranial Recording Electrode Single unit-based Dis |
| 89 | Spike Detector |
| 90 | Spike Characterizer |
| 91 | Spike Analyzer |
| 92 | Intracranial Stimulating Electrode Single unit-based |
| 93 | Disease state estimate signal path |
| 94 | Globus Pallidus Internus Internal Segment (GPi,i) |
| 95 | Globus Pallidus Internus External Segment (GPi,e) |
| 96 | Globus Pallidus Externus (GPe) |
| 97 | Optic Tract |
| 98 | Proximal Peripheral Nerve Electrode Array |
| 99 | Distal Peripheral Nerve Electrode Array |
| 100 | Proximal Peripheral Nerve Electrode Array connecti |
| 101 | Filter |
| 102 | Spectral Energy Characterizer |
| 103 | Spectral Energy Analyzer |
| 104 | Intracranial Recording Electrode Multiunit-based Dis |
| 105 | Disease State Estimate Path |
| 106 | Filter |
| 107 | Spectral Energy Characterizer |
| 108 | Spectral Energy Analyzer |
| 109 | Intracranial Stimulating Electrode Multiunit-based Di |
| 110 | Disease State Estimate Path |
| 111 | Stimulator Output Path |
| 112 | Stimulator Amplifier Output Path |
| 113 | Multiplexed Stimulator Recording Input Path |
| 114 | Stimulating Electrode Input Signal |
| 115 | Stimulating Electrode Output Signal |
| 116 | Reference Module |
| 117 | Aggregate Disease State Reference Signal Path |
| 118 | Disease State Reference Signal Path |
| 119 | Globus Palidus |
| 120 | Globus Pallidus Internus |
| 121 | Thalamus |
| 122 | Subthalamic Nucleus |
| 123 | Full Wave Rectifier |
| 124 | Envelope determiner |
| 125 | Filter |
| 126 | Threshold Discriminator |
| 127 | Filter |
| 128 | Threshold Discriminator |
| 129 | Filter |
| 130 | Threshold Discriminator |
| 131 | Filter |
| 132 | Threshold Discriminator |
| 133 | Filter |
| 134 | Threshold Discriminator |

| Numbr | Description |
|-------|---|
| 135 | Integrator |
| 136 | Counter |
| 137 | EMG Analyzer |
| 138 | Electromyography (EMG)-based Disease State Estimator |
| 139 | Artifact Rejecter |
| 140 | Supplementary Motor Area Signal Extractor |
| 141 | Full Wave Rectifier |
| 142 | Envelope Determiner |
| 143 | Filter |
| 144 | Full Wave Rectifier |
| 145 | Envelope Determiner |
| 146 | Filter |
| 147 | Full Wave Rectifier |
| 148 | Envelope Determiner |
| 149 | Filter |
| 150 | Full Wave Rectifier |
| 151 | Envelope Determiner |
| 152 | Filter |
| 153 | Full Wave Rectifier |
| 154 | Envelope Determiner |
| 155 | Electroencephalography (EEG)-based Disease State Estimator |
| 156 | Filter |
| 157 | Full Wave Rectifier |
| 158 | Envelope Determiner |
| 159 | Threshold Discriminator |
| 160 | Filter |
| 161 | Full Wave Rectifier |
| 162 | Envelope Determiner |
| 163 | Threshold Discriminator |
| 164 | Filter |
| 165 | Full Wave Rectifier |
| 166 | Envelope Determiner |
| 167 | Threshold Discriminator |
| 168 | Filter |
| 169 | Full Wave Rectifier |
| 170 | Envelope Determiner |
| 171 | Threshold Discriminator |
| 172 | Filter |
| 173 | Full Wave Rectifier |
| 174 | Envelope Determiner |
| 175 | Threshold Discriminator |
| 176 | Integrator |
| 177 | Counter |
| 178 | Acceleration Analyzer |
| 179 | Acceleration-based Disease State Estimator |
| 180 | Full Wave Rectifier |
| 181 | Envelope Determiner |
| 182 | Low Threshold Discriminator |
| 183 | High Threshold Discriminator |
| 184 | Timer |
| 185 | Spectral Analyzer |
| 186 | Acoustic Analyzer |
| 187 | Acoustic-based Disease State Estimator |
| 188 | Spike Detector |
| 189 | Spike Characterizer |
| 190 | Spike Analyzer |
| 191 | Filter |
| 192 | Spectral Energy Characterizer |
| 193 | Spectral Energy Analyzer |
| 194 | Peripheral Nerve Electrode (PNE)-based Single Unit Analyzer |
| 195 | Aggregate Disease State Estimator |
| 196 | Reference Module |
| 197 | Proportional Gain |
| 198 | Differential Gain |
| 199 | Integrator Gain |
| 200 | Nonlinear Controller Gain |
| 201 | Adaptive Controller Gain |
| 202 | Sliding Controller Gain |

| Numbr | Description |
|-------|---|
| 203 | Model-Reference Controller Gain |
| 204 | Differential Controller |
| 205 | Integral Controller |
| 206 | Nonlinear Controller |
| 207 | Adaptive Controller |
| 208 | Sliding Controller |
| 209 | Model-Reference Controller |
| 210 | Proportional Controller Weight |
| 211 | Differential Controller Weight |
| 212 | Integral Controller Weight |
| 213 | Nonlinear Controller Weight |
| 214 | Adaptive Controller Weight |
| 215 | Sliding Controller Weight |
| 216 | Model-Reference Controller Weight |
| 217 | Summator |
| 218 | Clock |
| 219 | Filter |
| 220 | Full Wave Rectifier |
| 221 | Envelope Determiner |
| 222 | Full Wave Rectifier |
| 223 | Envelope Determiner |
| 224 | Filter |
| 225 | Threshold Discriminator |
| 226 | Summator |
| 227 | Patient |
| 228 | Observer |
| 229 | Disease State Estimator Module Array |
| 230 | Proportional Controller |
| 231 | Control Law Circuit Block |
| 232 | Peripheral Nerve Electrode (PNE)-based Multiple U |
| 233 | EMG Signal Processor |
| 234 | EEG Signal Processor |
| 235 | Accelerometer Signal Processor |
| 236 | Acoustic Signal Processor |
| 237 | PNE Signal Processor |
| 238 | ICRE Signal Processor |
| 239 | ICSE Signal Processor |
| 240 | Memory Module |
| 241 | Analog Switch |
| 242 | Zener Diode |
| 243 | Zener Diode |
| 244 | Connection to noninverting input |
| 245 | Connection to inverting input |
| 246 | Intracranial Electrodes |
| 247 | Sensory Input Modalities |
| 248 | Neurological Control System |
| 249 | Sensor connector cable |
| 250 | head |
| 251 | brain |
| 252 | cortex |
| 253 | frontal cortex |
| 254 | parietal cortex |
| 255 | temporal cortex |
| 256 | occipital cortex |
| 257 | cerebellar cortex |
| 258 | orbital cortex |
| 259 | prefrontal cortex |
| 260 | motor cortex |
| 261 | sensory cortex |
| 262 | associative cortex |
| 263 | werneckie's area |
| 264 | brocas area |
| 265 | premotor cortex |
| 266 | supplementary motor cortex |
| 267 | visual cortex |
| 268 | V2 cortex |

| Numbr | Description |
|-------|---|
| 269 | S2 cortex |
| 270 | Thalamus |
| 271 | globus pallidus |
| 272 | globus pallidus internus |
| 273 | globus pallidus externus |
| 274 | subthalamic nucleus |
| 275 | thalamic ventrointermediate nucleus (Vim) |
| 276 | cingulate gyrus |
| 277 | hippocampus |
| 278 | amygdala |
| 279 | orbitofrontal modulator |
| 280 | prefrontal modulator |
| 281 | precentral modulator |
| 282 | postcentral modulator |
| 283 | parietal modulator |
| 284 | parietooccipital modulator |
| 285 | occipital modulator |
| 286 | cerebellar modulator |
| 287 | right parasagittal precentral modulator |
| 288 | left parasagittal precentral modulator |
| 289 | right lateral precentral modulator |
| 290 | left lateral precentral modulator |
| 291 | right superior anterior temporal modulator |
| 292 | left superior anterior temporal modulator |
| 293 | right inferior anterior temporal modulator |
| 294 | left inferior anterior temporal modulator |
| 295 | right parasagittal postcentral modulator |
| 296 | left parasagittal postcentral modulator |
| 297 | right lateral postcentral modulator |
| 298 | left lateral postcentral modulator |
| 299 | right superior temporal modulator |
| 300 | left superior temporal modulator |
| 301 | right inferior temporal modulator |
| 302 | left inferior temporal modulator |
| 303 | right parasagittal orbitofrontal modulator |
| 304 | left parasagittal orbitofrontal modulator |
| 305 | right lateral orbitofrontal modulator |
| 306 | left lateral orbitofrontal modulator |
| 307 | right parasagittal prefrontal modulator |
| 308 | left parasagittal prefrontal modulator |
| 309 | right lateral prefrontal modulator |
| 310 | left lateral prefrontal modulator |
| 311 | right parasagittal parietal modulator |
| 312 | left parasagittal parietal modulator |
| 313 | right lateral parietal modulator |
| 314 | left lateral parietal modulator |
| 315 | right superior posterior temporal modulator |
| 316 | left superior posterior temporal modulator |
| 317 | right inferior posterior temporal modulator |
| 318 | left inferior posterior temporal modulator |
| 319 | right lateral cerebellar modulator |
| 320 | left lateral cerebellar modulator |
| 321 | right parasagittal parietooccipital modulator |
| 322 | left parasagittal parietooccipital modulator |
| 323 | right lateral parietooccipital modulator |
| 324 | left lateral parietooccipital modulator |
| 325 | right inferior parietooccipital modulator |
| 326 | left inferior parietooccipital modulator |
| 327 | right parasagittal cerebellar modulator |
| 328 | left parasagittal cerebellar modulator |
| 329 | right parasagittal occipital modulator |
| 330 | left parasagittal occipital modulator |
| 331 | right lateral ventricle |
| 332 | left lateral ventricle |
| 333 | third ventricle |
| 334 | corpus callosum |
| 335 | right thalamus |
| 336 | left thalamus |

| Numbr | Description |
|-------|---|
| 337 | right internal capsule |
| 338 | left internal capsule |
| 339 | right globus pallidus externus |
| 340 | left globus pallidus externus |
| 341 | right globus pallidus internus |
| 342 | left globus pallidus internus |
| 343 | right globus pallidus internus external segment |
| 344 | left globus pallidus internus external segment |
| 345 | right globus pallidus internus internal segment |
| 346 | left globus pallidus internus internal segment |
| 347 | right globus pallidus |
| 348 | left globus pallidus |
| 349 | deep brain structures |
| 350 | modulator |
| 351 | magnetic coil |
| 352 | magnetic coil cross section |
| 353 | magnetic flux |
| 354 | neural tissue |
| 355 | optical source array |
| 356 | optical source |
| 357 | optical lens |
| 358 | optical beam |
| 359 | dura |
| 360 | modulator support |
| 361 | power supply |
| 362 | Pulse Generator |
| 363 | Papez's Circuit |
| 364 | mamillary bodies |
| 365 | fornix |
| 366 | orbitofrontal cortex |
| 367 | superior temporal gyrus |
| 368 | trigeminal nerve |
| 369 | vagus nerve |
| 370 | baroreceptor |
| 371 | sympathetic ganglion |
| 372 | Electromagnetic Coil |
| 373 | Electromagnetic Coil |
| 374 | Electromagnetic Coil |
| 375 | Magnetic Flux |
| 376 | Magnetic Flux |
| 377 | Magnetic Flux |
| 378 | Power Conversion Unit |
| 379 | Power Cable |
| 380 | Coil Holder |
| 381 | Bedding |
| 382 | Skin |
| 383 | Coil Pocket |
| 384 | Coil Pocket |
| 385 | Coil Pocket |
| 386 | Headband Coil Holder |
| 387 | Electromagnetic Coil |
| 388 | Electromagnetic Coil |
| 389 | Electromagnetic Coil |
| 390 | Electromagnetic Coil |
| 391 | Electromagnetic Coil |
| 392 | Electromagnetic Coil |
| 393 | Electromagnetic Coil |
| 394 | Electromagnetic Coil Cable |
| 395 | Electromagnetic Coil Cable |
| 396 | Power Modulator |
| 397 | Power Source |
| 398 | Head |
| 399 | Electromagnetic Coupling Element |
| 400 | Power Conversion Circuit |
| 401 | Rectifier |
| 402 | Energy Storage Element |

| Numbr | Description |
|-------------------------|---|
| 403 | Regulator |
| 404 | Filter |
| 405 | Demodulator |
| 406 | Amplifier |
| 407 | Electromagnetic Coupling Element Cable |
| 408 | Induced Current |
| 409 | Regulated Power |
| 410 | Incoming Data Stream |
| 411 | Outgoing Data Stream |
| 412 | Neuromodulation signal |
| 413 | Power Delivery Unit |
| 414 | Modulator |
| 415 | Amplifier |
| 416 | Inducing Current |
| 417 | Power Management Unit |
| 418 | Energy Storage Unit |
| 419 | Stimulation Recording and Power Circuit |
| 420 | Pericranium |
| 421 | Calvarium Outer Table |
| 422 | Calvarium Marrow Layer |
| 423 | Calvarium Inner Table |
| 424 | Mechanical Attachment |
| 425 | Mechanical Attachment Mount |
| 426 | Enclosure Outer Surface |
| 427 | Enclosure Inner Surface |
| 428 | Screw Mount |
| 429 | Screw |
| 430 | Screw Mount |
| 431 | Screw |
| 432 | Protruding Component |
| 433 | Recessed Component |
| 434 | System Enclosure |
| 435 | Brain Surface |
| CIP PDSTIM5-FF2 | |
| 436 | Catheter Mount Ball |
| 437 | Catheter Mount Socket |
| 438 | Bone Screw |
| 439 | Machine Screw |
| 440 | Cranial Attachment Plate |
| 441 | Catheter Recess |
| 442 | Calvarium Bit Inner Diameter Segment |
| 443 | Calvarium Bit Outer Diameter Segment |
| 444 | Calvarium Bit Shaft |
| 445 | Calvarium Drill |
| 446 | Calvarium Bit Penetration-Release Segment |
| 447 | Calvarium Drill Bit |
| 448 | Microelectrode Channel |
| 449 | Microelectrode |
| 450 | Microelectrode Tip |
| 451 | Intracranial Catheter Proximal End |
| Intracranial Catheter 1 | |
| 452 | Intracranial Catheter Proximal Electrode |
| 453 | Intracranial Catheter Proximal Electrode |
| 454 | Intracranial Catheter Proximal Electrode |
| 455 | Intracranial Catheter Proximal Electrode |
| 456 | Intracranial Catheter Proximal Electrode |
| 457 | Intracranial Catheter Proximal Electrode |
| 458 | Intracranial Catheter Proximal Electrode |
| 459 | Intracranial Catheter Proximal Electrode |
| 460 | Electrode Contact |
| 461 | Electrode Contact |
| 462 | Electrode Contact |
| 463 | Electrode Contact |
| 464 | Electrode Contact |
| 465 | Electrode Contact |
| 466 | Electrode Contact |
| 467 | Electrode Contact |

| Numbr | Description |
|--------------------------------|--|
| 468 | Electrode Contact Set Screw |
| 469 | Electrode Contact Set Screw |
| 470 | Electrode Contact Set Screw |
| 471 | Electrode Contact Set Screw |
| 472 | Electrode Contact Set Screw |
| 473 | Electrode Contact Set Screw |
| 474 | Electrode Contact Set Screw |
| 475 | Electrode Contact Set Screw |
| <i>Intracranial Catheter 2</i> | |
| 476 | Intracranial Catheter Proximal Electrode |
| 477 | Intracranial Catheter Proximal Electrode |
| 478 | Intracranial Catheter Proximal Electrode |
| 479 | Intracranial Catheter Proximal Electrode |
| 480 | Intracranial Catheter Proximal Electrode |
| 481 | Intracranial Catheter Proximal Electrode |
| 482 | Intracranial Catheter Proximal Electrode |
| 483 | Intracranial Catheter Proximal Electrode |
| 484 | Electrode Contact |
| 485 | Electrode Contact |
| 486 | Electrode Contact |
| 487 | Electrode Contact |
| 488 | Electrode Contact |
| 489 | Electrode Contact |
| 490 | Electrode Contact |
| 491 | Electrode Contact |
| 492 | Electrode Contact Set Screw |
| 493 | Electrode Contact Set Screw |
| 494 | Electrode Contact Set Screw |
| 495 | Electrode Contact Set Screw |
| 496 | Electrode Contact Set Screw |
| 497 | Electrode Contact Set Screw |
| 498 | Electrode Contact Set Screw |
| 499 | Electrode Contact Set Screw |
| 500 | Intracranial Catheter |
| 501 | Calvarium Stabilization Lip |
| 502 | Microelectrode Tunnel |
| 503 | Intracranial Catheter Port |
| 504 | Catheter Stabilization Means |
| 505 | Catheter Ball Channel |
| 506 | Catheter Mount System Enclosure Attachment Means |
| 507 | Catheter Mount Ball Locking Screw |
| 508 | System Enclosure Catheter Mount Attachment Means |
| 509 | Calvarium Bit Rollers |
| 510 | Communication and Power Link |
| 511 | Module Communication and Power Link |
| 512 | Module Communication and Power Link |
| 513 | Module Communication and Power Link |
| 514 | Module Communication and Power Link |
| 515 | Module Communication and Power Link |
| 516 | Module Communication and Power Link |
| 517 | Module Communication and Power Link |
| 518 | Module Communication and Power Link |
| 519 | Module Communication and Power Link |
| 520 | Module Communication and Power Link |
| 521 | Module Communication and Power Link |
| 522 | Module Communication and Power Link |
| 523 | Module Communication and Power Link |
| 524 | Module Communication and Power Link |
| 525 | |
| 526 | |
| 998 | NMS (neuromodulating signal) |
| 999 | Neurological Control System |